

In the Office Action mailed on August 7, 2002, the Examiner rejected claims 1-3, 5, and 8-15 under 35 U.S.C. §102(b) as being anticipated by Lewellyn, U.S. Patent No. 5,516,435, and rejected claims 4, 6, and 7 under 35 U.S.C. §103(a) as being unpatentable over Lewellyn '435.

With regard to the claim rejections under 35 U.S.C. §102(b), the Applicants respectfully submit that claims 1 and 11 are not anticipated by Lewellyn '435. To anticipate the claims of the present invention, an anticipating reference must describe and enable the claimed invention, including all claim limitations, with sufficient clarity and detail to establish that the subject matter already existed in the prior art and that its existence was recognized by persons of ordinary skill in the field of the invention.

The Examiner cites several portions of Lewellyn '435 as disclosing the method and agent for treating Bayer process liquor recited in the claims of the present application. However, the passages of Lewellyn '435 cite by the Examiner emphasize that it is the combination of at least two polymers, combined in certain specified ratios, which achieves the effects provided by the composition disclosed in Lewellyn '435. For example, col. 3, lines 25-67 of Lewellyn '435 (cited by the Examiner) states (with emphasis added):

“The present invention provides a process for reducing the suspended solids level in process streams, generally aluminate liquors, of the Bayer alumina manufacturing process whereby a first polymer containing hydroxamic acid groups or salts thereof and a second polymer selected from the group consisting of an alkali metal (meth)acrylate homopolymer, an ammonium (meth)acrylate homopolymer, and copolymers of said (meth)acrylates with (alk)acrylamide are added together to the Bayer process stream in order to effectively remove suspended solids therefrom. *However, as has been surprisingly discovered, effective flocculation performance can be attained only when certain ratios of the first and second polymer are used.*”

Similarly, the remaining portions of Lewellyn '435 cited by the Examiner describe a *combination of at least two polymers combined in specific ratios.*

In contrast to Lewellyn, the instantly claimed method and agent for treating a Bayer process liquor containing red mud comprises contacting the Bayer process liquor with, in combination, an effective amount of a water soluble synthetic flocculent, dextran and starch prior to separating red mud from the liquor. The *single* water soluble synthetic flocculent agent useful in the instant invention is selected from the group consisting of homopolymers of acrylic acid,

copolymers of acrylic acid and acrylamide, copolymers of acrylic acid and acrylamide modified to contain hydroxamic acid moiety and copolymers of acrylic acid and acrylamide modified to contain and acrylic acid moiety.

In view of the above, as Lewellyn '435 is directed to a composition having *at least two* polymers, *combined in certain, specific ratios*, this reference cannot describe and enable the present invention, including all claim limitations, with sufficient clarity and detail to establish that the subject matter already existed in the prior art and that its existence was recognized by persons of ordinary skill in the field of the invention. The use of a *single* polymer as a water soluble synthetic flocculent, in combination with dextran and starch, is not disclosed by Lewellyn '435.

In addition, the rejection of claims 4, 6 and 7 under 35 U.S.C. 103(a) as being unpatentable under Lewellyn is respectfully traversed. Applicants respectfully suggest as described above, that their claimed invention is not taught or suggested in Lewellyn even in view of the suggested "knowledge of one of ordinary skill in the art". Claims 4, 6 and 7 of the instant invention clearly differ as Lewellyn nowhere discloses using Applicant's combination of additives nor their aqueous solutions being added to a Bayer process liquor containing red mud in the sequence and location of addition as Applicant's invention. Applicants respectfully suggest that it cannot be obvious to one of ordinary skill in the art of liquid purification to modify a non-analogous method containing different materials to obtain Applicant's instant invention. Lewellyn so modified would no longer embody the essential aspects of his invention, e.g., at least two different, specific polymers added in inverse emulsions in specific ratios to the process. Applicants respectfully state that a showing of unexpected results is unnecessary as no *prima facie* case of obviousness has been presented either in the cited reference or its purported combination with so called knowledge of one of ordinary skill in the art.

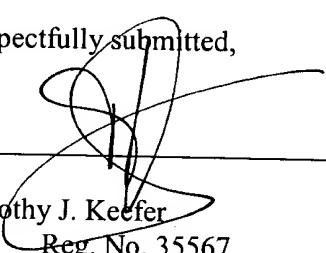
For the reasons stated above, the Applicants respectfully submit that claims 1-3, 5, and 8-15 are not anticipated by Lewellyn '435. Applicants also submit that Lewellyn '435. fails to establish a case of *prima facie* obviousness for claims 4, 6 and 7; therefore, the rejection of claims 4, 6 and 7 should be withdrawn. As claim 1 is believed to be patentable over the cited references, it is submitted that claims 2-10 are also patentable as they depend from claim 1. Also, as claim 11 is believed to be patentable, it is submitted that claims 12-15 are also patentable as they depend from claim 11.

In view of the above amendments and remarks, the Applicants respectfully submit that all rejections of record have been overcome. The Applicants respectfully request favorable reconsideration and allowance of the present application.

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